

Title:

Peptic perforation due to *Candida* spp.

Authors:

Silvia Fernández Noël, Julia Gutiérrez de Prado, Óscar Caso Maestro, Carmelo Loinaz Seguro, Iago Justo Alonso

DOI: 10.17235/reed.2025.11095/2025

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Fernández Noël Silvia, Gutiérrez de Prado Julia, Caso Maestro Óscar, Loinaz Seguro Carmelo, Justo Alonso Iago. Peptic perforation due to *Candida* spp.. Rev Esp Enferm Dig 2025. doi: 10.17235/reed.2025.11095/2025.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Peptic perforation due to *Candida spp.*

Silvia Fernández Noël ^a, Julia Gutiérrez de Prado ^a, Óscar Caso Maestro, Carmelo Loinaz Seguro ^a, Iago Justo Alonso ^a

^a Hospital Universitario 12 de octubre, Servicio Cirugía General y del Aparato Digestivo, Madrid.

Autor de correspondencia: Silvia Fernández Noël. Avenida de Andalucía, SN.
Silvia.f.noel@gmail.com

Conflict of interest: None

Keywords: *Candida*. Peptic ulcer. Perforation.

Dear Editor,

Infection by *Helicobacter pylori* (HP) is the main factor associated with peptic ulcer (PU), with a prevalence of 90-100% (1); eradication treatment and proton-pump inhibitors have reduced its incidence. In case of perforation, the presence of HP is lower (40-70%) and has not decreased, suggesting other mechanisms involved (2,3). *Candida* infection has been identified in more than half of patients with PU and in 30-40% cases of gastric perforation, being associated with an increase in mortality (4). Several studies suggest that *Candida* plays an important role in ulcer perforation, improving survival with antifungal treatment (5).

We present 2 clinical cases from 12 de Octubre Hospital, Madrid.

Case reports

First case: A 59-year-old male with type DM2 presented with duodenal perforation and biliopurulent peritonitis. Laparoscopic approach was performed: primary closure with omental patch. Was necessary reintervention on the second day due to a bile leak

from the previous perforation site: a new laparoscopic approach, primary closure with omental patch. On the third day, we performed another surgery revision because of bile leak persistence from the known perforation: open approach, duodenal exclusion, gastroenterostomy, and biliary tract exclusion with a Kher tube. Duodenal biopsy revealed *Candida*, so a 14-day antifungal treatment was initiated. The patient had a favorable evolution afterward.

Second case: A 45-year-old female presented with perforation on the anterior wall of the first duodenal portion and biliary peritonitis. A, exploratory laparoscopy was performed: primary suturing, and omental patch. Culture of abdominal fluid grew *Candida*, and it was given treatment with Fluconazole for 3 weeks. The patient had a favorable outcome.

Discussion

Candida spp. is part of the saprophytic flora of the gastrointestinal tract (GIT), being candidiasis the most common fungal infection, especially in immunocompromised patients. It is an opportunistic pathogen, frequently described in peritoneal cultures with peritonitis (1,5). Coinfection with *Candida* is associated with higher mortality, being a poor prognostic factor in the Jabalpur Predictive Score (5).

The diagnosis is made by observing hyphae in biopsies or the growth of *Candida* in peritoneal fluids. Although perforation exposes the abdominal cavity to GIT flora, confirmation of *Candida* requires cultures or biopsies. Antifungal treatment has been shown to reduce mortality, while inadequate antimicrobial treatment increases mortality (5).

It is recommended to perform peritoneal culture or tissue biopsy to ensure adequate coverage and prevent complications such as septic shock, whose morbidity can reach 50%.

Bibliography

1. Bollo J, Carrilo E, Lupu I, Caballero F, Trias M. Perforación gástrica asociada a infección por *Candida*. *Gastroenterol Hepatol*. 2009;32(7):499-501.
2. Nakamura T, Yoshida M, Ishikawa H, Kameyama K, Wakabayashi G, Otani Y,

- et al. *Candida albicans* aggravates duodenal ulcer perforation induced by administration of cysteamine in rats. *J Gastroenterol Hepatol.* 2007;22(5):749-56.
3. Søreide K, Thorsen K, Harrison EM, Bingener J, Møller MH, Ohene-Yeboah M, et al. Perforated peptic ulcer HHS Public Access. *Lancet* [Internet]. 2015;386(10000):1288-98. Disponible en: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4618390/pdf/nihms730003.pdf>
 4. James B. Peoples, M.D., Daylon O. *candida and perforated ulcers.pdf*. Chicago; 1986. p. 6-8.
 5. Prakash A, Sharma D, Saxena A, Somashekar U, Khare N, Mishra A, et al. Effect of *Candida* infection on outcome in patients with perforation peritonitis. *Indian J Gastroenterol.* 2008;27(3):107-9.

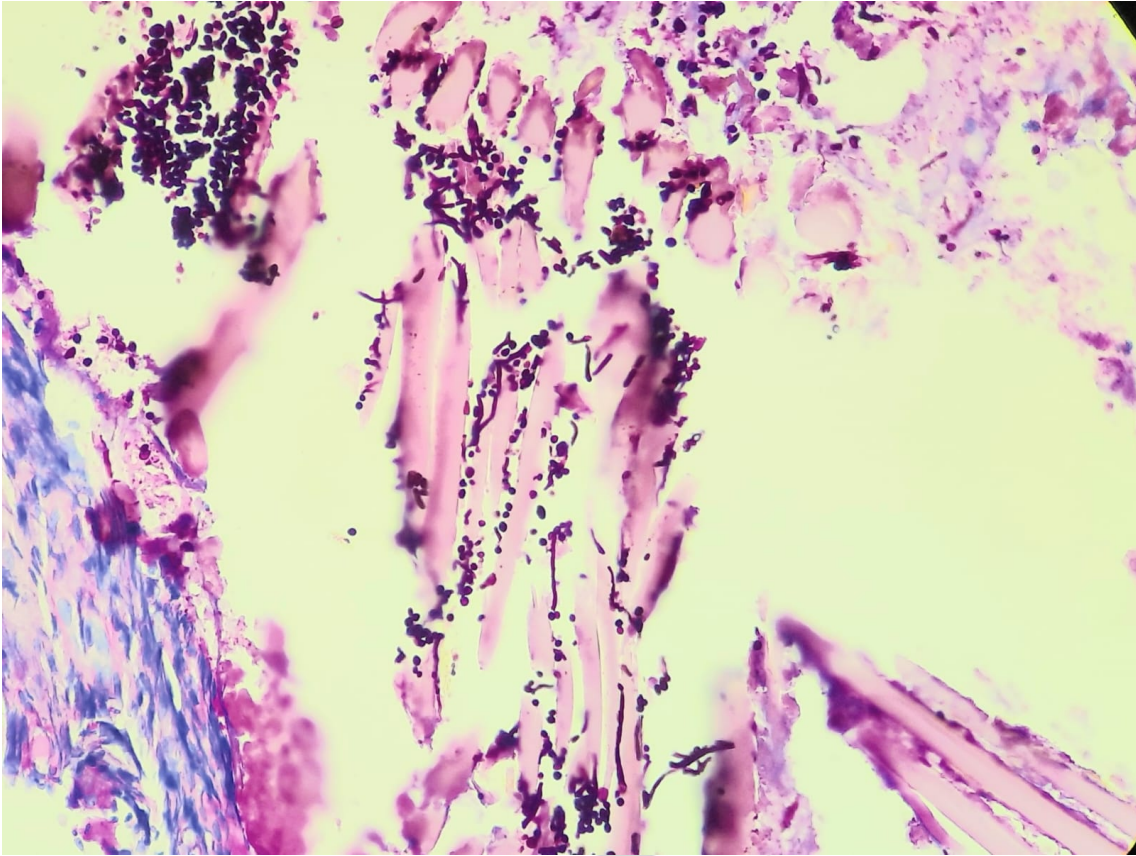


Figure 1. Candida spp hyphae

Accepted